

SEQUENCE LISTING

<110> Hu, Yi

Kieke, James Alvin

Turner, C. Alexander Jr.

Nehls, Michael C.

Friedrich, Glenn

Zambrowicz, Brian

Sands, Arthur T.

<120> Novel Human Ion Channel Protein and
Polynucleotides Encoding the Same

<130> LEX-0160-USA

<150> US 60/194,255

<151> 2000-04-03

<160> 3

<170> FastSEQ for Windows Version 4.0

<210> 1

<211> 2772

<212> DNA

<213> homo sapiens

<400> 1		
atgccccgcc accacgcggg aggagaggag ggcggcgccg ccgggctctg ggtgaagagc	60	
ggcgcagcgg cggcgccggc gggcggggg cgcttggca gcggcatgaa gtatgtggag	120	
tccggccggg gcaggggtct gctgaactcg gcagccgcca ggggcacgg cctgctactg	180	
ctgggcaccc gcgcggccac gctcggtggc ggcggcggtg gcctgaggga gagccgcccgg	240	
ggcaagcagg gggcccgat gggcctgctg gggaaagccgc tctcttacac gatgtccag	300	
agctgccggc gcaacgtcaa gtaccggcg gtgcagaact acctgtacaa cgtgctggag	360	
agaccccgcg gctggcggtt catctaccac gcttcgttt ttctcttgc ttgggttgc	420	
ttgattttgt cagtgtttt taccatccct gagcacacaa aattggcctc aagttgcctc	480	
ttgatccctgg agttcgtat gattgtcg tttgggttgg agttcatcat tcgaatctgg	540	
tctgcgggtt gctgttgctg atataagggaa tgcaaggaa gactgagggt tgctcgaaag	600	
cccttctgtt ttatagatac cattgttctt atcgcttcaa tagcagttgt ttctgcaaaa	660	
actcagggtt atattttgc cacgtctgca ctcagaagtc tccgttctt acagatccctc	720	
cgcattggtc gcatggaccg aaggggaggc acttggaaat tactgggtt agtggtttat	780	
gctcacagca aggaattaat cacagcttgg tacataggat tttggttct tatttttgc	840	
tcttccttg tctatctgtt ggaaaaggat gccaataaaag agtttctac atatgcagat	900	
gctctctggt ggggcacaat tacattgaca actattggct atggagacaa aactccccca	960	
acttggctgg gaagattgtt ttctgcaggc ttgcactcc ttggcatttc tttctttgca	1020	
cttcctgccc gcattcttgg ctcaagggtt gcattaaaag tacaagaaca acaccgcccag	1080	
aaacactttt agaaaagaag gaaccctagct gcaacacctca ttcagttgtt tgccgttagt	1140	
tacgcagctg atgagaatac tggttccatt gcaacctgga agccacactt gaaggcccttg	1200	
cacacctgca gccctaccaa tcagaagcta agtttaagg agcgagtgcg catggctagc	1260	
cccagggggcc agagtattaa gagccgacaa gcctcagtag gtgacaggag gtccccaaagc	1320	
accgacatca cagccgaggg cagtccttccaa aaagtgcaga agagctggag cttcaacgac	1380	
cgaacccgct tccggccctc gctgcgcctc aaaagttctc agccaaaacc agtgcataat	1440	
gctgacacag cccttggcac tgatgtatgtt tatgtatgaaa aaggatgcca gtgtgtatgt	1500	
tcagtggaaag acctcaccctt accactaaa actgtcattt gagctatcag aattatgaaa	1560	
tttcatgtt caaaacggaa gtttaaggaa acattacgtc catatgtatgtt aaaaatgtc	1620	
attgaacaat attctgttgc tcatctggc atgttgttga gaattaaaag cttcaaaaca	1680	
cgtgttgc aaattcttgg aaaaggccaa atcacatcag ataagaagag ccgagagaaaa	1740	
ataaacagcag aacatgagac cacagacat ctcagttatgc tcggctgggt ggtcaagggtt	1800	
aaaaaaacagg tacagtccat agaatccaag ctggactgccc tactagacat ctatcaacag	1860	
gtccttcgga aaggctctgc ctcagccctc gctttggctt cattccagat cccaccttt	1920	
aatgtgaac agacatctga ctatcaaagc cctgtggata gaaagatct ttcgggttcc	1980	

gcacaaaaca	gtggctgctt	atccagatca	actagtgcga	acatctcgag	aggcctgcag	2040
ttcatttctga	cgc当地aaatga	gttc当地gtcc	cagactttct	acgc当地gttag	ccctactatg	2100
cacagtc当地aa	caacacaggta	gc当地atttg	caaagc当地atg	gctc当地agcgt	ggc当地gccc当地	2160
aacaccattg	caaacc当地aaat	aaatac当地ggca	cccc当地agccag	c当地gcccc当地aa	aactt当地acag	2220
atccccacctc	ctctccc当地agc	catcaagcat	ctgccc当地aggc	c当地aga当地actct	gcacc当地cta	2280
cctgcaaggct	tacagg当地aaag	catttctgac	gtc当地accac	gc当地ttgtt当地	ctcc当地aggaa	2340
aatgttcaagg	ttgc当地acagtc	aaatctc当地acc	aaggacc当地ttt	ctatgagg当地aa	aagctt当地gac	2400
atgggaggagg	aaactctgtt	gtctgtctgt	ccc当地atgg	c当地gaaggactt	ggc当地aaatct	2460
ttgtctgtgc	aaaacctgtat	cagggtc当地acc	gaggaa	actgta	ttc当地aggg	2520
gagtcaagtg	gctccagagg	cagccaa	gat	atatacaact	ttc当地aggg	2580
tttataactg	atgaagaggt	gggtccc当地gaa	gagacag	gaga	atcc当地aaattg	2640
ccgc当地agcctg	ccaggga	tgc当地tttgca	tcagact	ctc	tgatgccc当地	2700
tc当地atctc当地aga	gcattt当地gttaa	ggcagg	agg	actgat	taaggactgg	2760
aaactgaaat	aa				aaggtcac	2772

<210> 2
<211> 923
<212> PRT
<213> homo sapiens

Ser Phe Phe Ala Leu Pro Ala Gly Ile Leu Gly Ser Gly Phe Ala Leu
340 345 350
Lys Val Gln Glu Gln His Arg Gln Lys His Phe Glu Lys Arg Arg Asn
355 360 365
Pro Ala Ala Asn Leu Ile Gln Cys Val Trp Arg Ser Tyr Ala Ala Asp
370 375 380
Glu Lys Ser Val Ser Ile Ala Thr Trp Lys Pro His Leu Lys Ala Leu
385 390 395 400
His Thr Cys Ser Pro Thr Asn Gln Lys Leu Ser Phe Lys Glu Arg Val
405 410 415
Arg Met Ala Ser Pro Arg Gly Gln Ser Ile Lys Ser Arg Gln Ala Ser
420 425 430
Val Gly Asp Arg Arg Ser Pro Ser Thr Asp Ile Thr Ala Glu Gly Ser
435 440 445
Pro Thr Lys Val Gln Lys Ser Trp Ser Phe Asn Asp Arg Thr Arg Phe
450 455 460
Arg Pro Ser Leu Arg Leu Lys Ser Ser Gln Pro Lys Pro Val Ile Asp
465 470 475 480
Ala Asp Thr Ala Leu Gly Thr Asp Asp Val Tyr Asp Glu Lys Gly Cys
485 490 495
Gln Cys Asp Val Ser Val Glu Asp Leu Thr Pro Pro Leu Lys Thr Val
500 505 510
Ile Arg Ala Ile Arg Ile Met Lys Phe His Val Ala Lys Arg Lys Phe
515 520 525
Lys Glu Thr Leu Arg Pro Tyr Asp Val Lys Asp Val Ile Glu Gln Tyr
530 535 540
Ser Ala Gly His Leu Asp Met Leu Cys Arg Ile Lys Ser Leu Gln Thr
545 550 555 560
Arg Val Asp Gln Ile Leu Gly Lys Gly Gln Ile Thr Ser Asp Lys Lys
565 570 575
Ser Arg Glu Lys Ile Thr Ala Glu His Glu Thr Thr Asp Asp Leu Ser
580 585 590
Met Leu Gly Arg Val Val Lys Val Glu Lys Gln Val Gln Ser Ile Glu
595 600 605
Ser Lys Leu Asp Cys Leu Leu Asp Ile Tyr Gln Gln Val Leu Arg Lys
610 615 620
Gly Ser Ala Ser Ala Leu Ala Leu Ala Ser Phe Gln Ile Pro Pro Phe
625 630 635 640
Glu Cys Glu Gln Thr Ser Asp Tyr Gln Ser Pro Val Asp Ser Lys Asp
645 650 655
Leu Ser Gly Ser Ala Gln Asn Ser Gly Cys Leu Ser Arg Ser Thr Ser
660 665 670
Ala Asn Ile Ser Arg Gly Leu Gln Phe Ile Leu Thr Pro Asn Glu Phe
675 680 685
Ser Ala Gln Thr Phe Tyr Ala Leu Ser Pro Thr Met His Ser Gln Ala
690 695 700
Thr Gln Val Pro Ile Ser Gln Ser Asp Gly Ser Ala Val Ala Ala Thr
705 710 715 720
Asn Thr Ile Ala Asn Gln Ile Asn Thr Ala Pro Lys Pro Ala Ala Pro
725 730 735
Thr Thr Leu Gln Ile Pro Pro Pro Leu Pro Ala Ile Lys His Leu Pro
740 745 750
Arg Pro Glu Thr Leu His Pro Asn Pro Ala Gly Leu Gln Glu Ser Ile
755 760 765
Ser Asp Val Thr Thr Cys Leu Val Ala Ser Lys Glu Asn Val Gln Val
770 775 780
Ala Gln Ser Asn Leu Thr Lys Asp Arg Ser Met Arg Lys Ser Phe Asp
785 790 795 800
Met Gly Gly Glu Thr Leu Leu Ser Val Cys Pro Met Val Pro Lys Asp
805 810 815
Leu Gly Lys Ser Leu Ser Val Gln Asn Leu Ile Arg Ser Thr Glu Glu
820 825 830
Leu Asn Ile Gln Leu Ser Gly Ser Glu Ser Ser Gly Ser Arg Gly Ser

835	840	845	
Gln Asp Phe Tyr Pro Lys Trp Arg Glu Ser Lys Leu Phe Ile Thr Asp			
850	855	860	
Glu Glu Val Gly Pro Glu Glu Thr Glu Thr Asp Thr Phe Asp Ala Ala			
865	870	875	880
Pro Gln Pro Ala Arg Glu Ala Ala Phe Ala Ser Asp Ser Leu Arg Thr			
885	890	895	
Gly Arg Ser Arg Ser Ser Gln Ser Ile Cys Lys Ala Gly Glu Ser Thr			
900	905	910	
Asp Ala Leu Ser Leu Pro His Val Lys Leu Lys			
915	920		

<210> 3
<211> 3111

<212> DNA
<213> homo sapiens

cgcagcctgc caggaaagct gcctttgcat cagactctct aaggactgga aggtcacgat 2760
catctcagag cattttaag gcaggagaaa gtacagatgc cctcagctt cctcatgtca 2820
aactgaaaata agttttcat tttcttcca ggcatalogc ttcttagcc atacatatca 2880
ttgcatgaac tatttcgaaa gcccttcaa aaagttgaaa ttgcaagaat cgggaagaac 2940
atgaaaggca gtttataagc ccgttacctt ttaattgcat gaaaatgcat gtttagggat 3000
ggctaaaatt ccaaggtgca tcgacattaa cccactcatt agtaatgtac cttgagttaa 3060
aaaggctgag aaaccaaaca cagcttaatg ctatgggggg tatgaatatg t 3111